WILLIAM T. PECORA AWARD

DR. VINCENT V. SALOMONSON

In recognition of his outstanding achievements in the scientific investigation of the Earth from space, both as a scientist and as a director of scientific activities, and for his contributions to the advancement of remote sensing instrumentation in the visible, infrared and microwave regions.

Dr. Vincent V. Salomonson has pursued an increasingly broad program of research in the Earth sciences, beginning with his individual research in water resources and atmospheric radiative transfer. He pioneered in the use of remote sensing to estimate important watershed properties. He moved on to greater responsibilities as the Head of the Hydrospheric Sciences Branch at NASA's Goddard Space Flight Center where he developed a program encompassing soil moisture and snow studies. Under his leadership, advanced sensors and techniques were developed which utilize active and passive microwave systems. The fruits of these efforts are seen in current airborne sensors and will be seen in the future in the proposed Earth Observing System.

Since 1980, he has been Chief of the Laboratory for Terrestrial Physics of NASA's Goddard Space Flight Center. He led in the transformation of an applications oriented program into a broadly based and highly successful scientific program in ecology, hydrology, geology, geophysics and geodynamics. In addition to the Laboratory's pioneering efforts in pure research, a number of significant long-term projects are being undertaken and successfully conducted: Global Inventory Monitoring and Modelling Studies (GIMMS); the First ISLSCP (International Satellite Land Surface Climatology Project) Field Experiment (FIFE); development and improvement of precision gravity and magnetic models of the Earth; improved and precise analysis of conditions and factors affecting the Earth's wobble and rate of rotation; and precise study of plate motions. Dr. Salomonson's personal research over the years has led to the publication of well over 100 papers, ranging from radiometric calibration and data quality, through earth, water, and atmospheric sciences, to advanced system concepts and global measurement concerns. He has continued an active personal research program which recently involved comparative analysis of the German built Modular Optoelectronic Multispectral Scanner (MOMS) and the Landsat Thematic Mapper.

Dr. Salomonson has served as the Project Scientist for Landsat 4 and Landsat 5. Under his leadership, the Thematic Mappers on these two satellites are the best characterized and most scientifically useful of the land remote sensing systems ever placed into orbit. He led the Landsat Image Data Quality Assessment, an innovative two year long, multi-institution program to characterize the radiometric and geometric performance of these sensors. He also served as both Project and Program Scientist for a time, and established the Thematic Mapper Science Program, the first widely supported multidisciplinary research program utilizing Landsat since Landsat 1 was launched in 1972.

Dr. Salomonson serves as the Team Leader for the Moderate Resolution Imaging Spectrometer (MODIS) which will fly on the Earth Observing System in the mid-1990's. In addition, he serves as the Chairman of SubCommission A.3 of the Interdisciplinary Scientific Commission A on Space Studies of Earth's Surface, Meteorology and Climate of COSPAR. He currently serves as an associate editor of 3 major remote sensing journals.

In recognition of his many accomplishments, the National Aeronautics and Space Administration and the Department of the Interior take pleasure in granting the 1987 William T. Pecora Award to Dr. Vincent V. Salomonson.

Donald Paul Hodel

Secretary of the Interior

Administrator, National Aeronautics and Space Administration